



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of  
**NAZARE, et al.**

Examiner:

Art Unit: 1713

Application No.: **10/848,743**

Filed: **05/19/2004**

Title: **Indole Derivatives as Factor Xa  
Inhibitors**

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope addressed to Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on Date of Deposit January 12, 2005  
Printed Name of Person Signing Certificate Paul Irvine

Signature

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 C.F.R. 1.56, 1.97 AND 1.98**

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Applicants submit herewith patents, publications, and other information of which they are aware, which they believe may be material, as defined in 37 C.F.R. 1.56(b), to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 C.F.R. 1.56(a). While the information referred to in this Information Disclosure Statement may be material pursuant to 37 C.F.R. 1.56(b), the filing of this Information Disclosure Statement is not intended to, pursuant to 37 C.F.R. 1.97(h), constitute an admission that any patent, publication or other information referred to is, or is considered to be, material to the patentability of this invention. Pursuant to 37 C.F.R. 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information exists.

- ☒ (a) This Information Disclosure Statement is filed within the period set forth in §1.97(b) because it accompanies the new patent application submitted herewith, is filed within three months of the filing date of a national application or within three months of the date of entry of the national stage as set forth in §1.491 in an international application, or is believed to be filed before the mailing date of a first Office Action on the merits, whichever event occurs last. However, in the event that the first office action has been mailed, the Commissioner is authorized to charge any fees under 37 C.F.R. 1.17(p) or credit any overpayment to Account No. **18-1982**.

- ☐ (b) This Information Disclosure Statement is filed after the period set forth in 37 C.F.R. 1.97(b), but is believed to be filed before the mailing date of a final action under §1.113 or a notice of allowance under §1.311, whichever occurs first.
- ☐ (1) The undersigned attorney certifies that each item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement;
- ☐ (2) The undersigned attorney certifies that no item of information contained in this Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned attorney after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of this statement; or
- ☐ (3) This Information Disclosure Statement is accompanied by a transmittal letter in which payment of the fee set forth in §1.17(p) and required by 37 C.F.R. 1.97(c) is authorized.

A concise explanation of the relevance of some or all of the items listed on the attached PTO-1449 (modified) is as follows:

The items listed on pages 1 –7 of the attached PTO-1449 have been previously submitted to the Patent Office or cited by the Examiners during the prosecution of the following patents or patent applications commonly owned by the assignees of record of the present case:  
U.S. Patent Application Nos. 10/849,089.

Therefore, a copy of the reference is not enclosed with this Information Disclosure Statement. However, the applicant will furnish a copy of any listed reference, if so requested by the Examiner.

The items listed on pages 8 and 9 of the attached PTO-1449 are a new submission. A copy of each reference therein is enclosed.

For the listed Japanese patent publication (09087282), we only reviewed the English abstract, which is enclosed herewith.

Respectfully submitted,



---

Joseph D. Rossi, Reg. No. 47,038  
Attorney for Applicant

Aventis Pharmaceuticals Inc.  
Patent Department  
Route #202-206 / P.O. Box 6800  
Bridgewater, NJ 08807-0800  
Telephone (908) 231-2843  
Telefax (908) 231-2626

Aventis Docket No. DEAV2003/0035US NP

+

Sheet	1	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP
-------	---	----	---	------------------------	-------------------------

## U.S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

+

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	2	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ADANG Anton E P et al., A New Generation of Orally Active Antithrombotics: Comparing Strategies in the GPIIb/IIIa, Thrombin and Factor Xa Areas, Drugs of the Future 2000; Vol. 25(4); pgs. 369-383	
		BESWICK, P. et al. , The Synthesis of 4 - Substituted Indoles via Arenetricarbonylchromium(0) Complexes, Tetrahedron Vol.44, No.23, pp. 7325 - 7334, (1988)	
		BORNSTEIN, et. al. , Facile Hydrolysis of the Trifluoromethyl Group in the Presence of Base. Some Trifluoromethylated Indoles, J. Amer. Chem. Soc. 79 (1957) 1745	
		BRENNAN Mary R et al., The Preparation and Spectral Characterization of 2-Haloindoles, 3-Haloindoles, and 2,3-Dihaloindoles, Heterocycles, 1986, Vol. 24, No. 10, pgs. 2879-2885	
		BUNDGAARD, Hans, Novel Chemical Approaches in Prodrug Design, Drugs of the Future, (1991), Vol. 16, No 5, pp. 443 - 458	
		BURTON Harold et al., The Synthesis of 5- and 6-Benzoyloxyindoles and Attempts to prepare 5- and 6-Hydroxyindoles therefrom, J. Chem. Society, 1937, pgs. 1726-1728	
		CADDICK, et al., Microwave Assisted Organic Reactions, Tetrahedron; 51; 1995; pp.10403-10432.	
		CHAN Dominic M T et al., New N- and O-Arylations with Phenylboronic Acids and Cupric Acetate, Tetrahedron Letters, 1998, Vol. 39, pgs. 2933-2936	
		CHEN, Cheng-yi et al., Syntheses of Indoles via a Palladium-Catalyzed Annulation between Iodoanilines and Ketones, J. Org. Chem., 1997, Vol. 62, pgs. 2676-2677	
		CHENG Yung-Chi et al., Relationship Between the Inhibition Constant (K1) and the Concentration of Inhibitor which causes 50 per cent Inhibition (I 50) of an Enzymatic Reaction, Biochem. Pharmacol., 1973, Vol. 22, pgs 3099-3108	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	3	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>*</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		CHIKVAIDZE J Sh et al, Indole Derivatives , Khim. Geterotsikl. Soedin, 1991, Bol. 11, pgs. 1508-1511	
		COLLOT, et al., Regiospecific Functionalization of Indole-2-Carboxylates and Diastereoselective Preparation of the Corresponding Indolines, Heterocycles; 51; 12; 1999; pp.2823-2846.	
		COMINS Daniel L et al., N-Methyl Lithiation of N-Methylindoles Directed by a-Amino Alkoxides, Tetrahedron Letters, 1989, Vol. 30, No. 33, pgs. 4337-4340	
		DESARBRE, E. et al., Synthesis of 2-Substituted-1H-Pyrrolo[2,3-b]Pyridines: Preparation of 7-Azaolivacine Analogue and 7-Azaindolopyridopyrimidine Derivatives., Tetrahedron Vol.53 No.10 (1997) pp. 3637 - 3648	
		DORMOY, J.-R. et al., Synthese Industrielle En Series Ellipticine. , Tetrahedron Vol. 49 No.14 (1993) pp. 2885 - 2914	
		EZQUERRA Jesús et al., Efficient Reagents for the Synthesis of 5-, 7-, and 5,7-Substituted Indoles Starting from Aromatic Amines; Scope and Limitations, J. Org. Chem., 1996, Vol. 61, pgs. 5804-5812	
		FLEISHER David et al., Improved Oral Drug Delivery: Solubility Limitations Overcome by the Use of Prodrugs, Advanced Drug Delivery Reviews; 1996; Vol. 19; pgs. 115-130	
		GRAY Nancy M et al., Novel Indole-2-Carboxylates as Ligands for the Strychnine-Insensitive N-Methyl-D-aspartate-Linked Glycine Receptor, J. Med. Chem., 1991, Vol. 34, pgs. 1283-1292	
		HARTWIG John F et al., Room-Temperature Palladium-Catalyzed Amination of Aryl Bromides and Chlorides and Extended Scope of Aromatic C-N Bond Formation with a Commercial Ligand, J. Org. Chem., 1999, Vol. 64, pgs. 5575-5580	
		HASAN Ilifat et al., Synthesis and Reactions of N-Protected 2-Lithiated Pyrroles and Indoles. The tert-Butoxycarbonyl Substituent as a Protecting Group, J. Org. Chem., 1981, Vol. 46, pgs. 157-164	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/C8B (10-96)  
Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	4	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T <sup>2</sup>
		HIREMATH Shivayogi P et al., Synthesis & Reaction of Indole-1,2-Dicarboxaldehydes with Hydrazine & Hydroxylamine, Indian J. of Chemistry, 1980, Vol. 19B, pgs. 770-774		
		KHANNA Ish K et al., 1,2-Diarylimidazoles as Potent, Cyclooxygenase-2 Selective, and Orally Active Antiinflammatory Agents, J. Med. Chem., 1997, Vol. 40, pgs. 1634-1647		
		KLINE Toni, Preparation of 2-Iodotryptamine and 2-Iodo-5-methoxytryptamine, J. Heterocycl. Chem., 1985, Vol. 22, pgs. 505-509		
		KRSTENANSKY, et al., Recent Advances in Microwave-assisted Organic Synthesis, Current Opinion in Drug Discovery & Development; 3(4); 2000; pp.454-461.		
		KUNERI, M., Indole-related compounds. IV The reaction of Phosphorus pentachloride with Ethyl indole-2-carboxylate., Chem. Abstr. (1962) pp. 3441i - 3442b		
		KWONG, F. et al., Copper-Catalyzed Coupling of Alkylamines and Aryl Iodides: An Efficient System Even in an Air Atmosphere, Organic Letters Vol.4 No.4 (2002) pp. 581-584		
		LAM Patrick Y S et al., New Aryl/Heteroaryl C-N Bond Cross-coupling Reactions via Arylboronic Acid/Cupric Acetate Arylation, Tetrahedron Letters, 1998, Vol. 39, pgs. 2941-2944		
		LARHED, et al., Microwave-assisted high-speed chemistry: a new technique in drug discovery, Drug Discovery Today; 8; 2001; pp.406-416.		
		LAROCC, R., et al., Synthesis of Indoles via Palladium-Catalyzed Heteroannulation of Internal Alkynes, J. Am. Chem. Soc. Vol. 113 (1991) pp. 6689 - 6690		
		LIDSTROM, et al., Microwave assisted organic synthesis - a review, Tetrahedron; 57; 2001; pp.9225-9283.		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/C8B (10-96)  
Approved for use through 10/31/99. OMB 0651-0031  
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	5	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS				
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>	
		LINDWALL H G et al., Synthesis and Reactions of Indole Carboxylic Acids; Pyridindolones from Indole-2-Carboxyacetylbenzylamides, J. Org. Chem., 1953, Vol. 18, pgs. 345-357		
		MANN, et al., Palladium-Catalyzed C-N(sp <sup>2</sup> ) Bond Formation: N-Arylation Of Aromatic And Unsaturated Nitrogen And The Reductive Elimination Chemistry Of Palladium Azolyl And Methyleneamido Complexes, J. Am. Chem. Soc. (1998), 120, 827-828		
		MATTER, Hans et al., Design and Quantitative Structure - Activity Relationship of 3-Amidinobenzyl-1H-indole-2-carboxamides as Potent, Nonchiral, and Selective Inhibitors of Blood Congestion Factor Xa, Journal of Medicinal Chemistry, (2002), Vol. 45, pp. 2749 - 2769		
		MEDERSKI Werner W K R et al., N-Aryl Heterocycles via Coupling Reactions with Arylboronic Acids, Tetrahedron, 1999, Vol. 55, pgs. 12757-12770		
		MURAKAMI Yasuoki et al., p-Toluenesulfonic Acid and Cation Exchange Resin in Aprotic Solvent: Valuable Catalysts for Fischer Indolization, Heterocycles, 1984, Vol. 22, No. 5, pgs.1211-1216		
		NICHOLS David E et al., 1-(2,5-Dimethoxy-4-(trifluoromethyl)phenyl)-2-aminopropane: A Potent Serotonin 5-HT 2A/2C Agonist, J. Med. Chem., 1994, Vol. 37, pgs. 4346-4351		
		NOLAND Wayland E et al., Ethyl Indole-2-Carboxylate, Org. Synth. Coll., 1973, Vol. V., J. Wiley New York, pgs. 567-571		
		OLD David W et al., Efficient Palladium-Catalyzed N-Arylation of Indoles, Organic Letters, 2000, Vol. 2, No. 10, pgs. 1403-1406		
		OSTREM James A et al., Discovery of a Novel, Potent, and Specific Family of Factor Xa Inhibitors via Combinatorial Chemistry, Biochemistry, 1998, Vol. 37, pgs. 1053-1059		
		POWERS James C, Chloroindoles, J. Org. Chem., 1966, Vol. 31, pgs. 2627-2631		

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	6	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		ROESCH, et al., Synthesis of Isoindolo[2,1-a]indoles by the Palladium-Catalyzed Annulation of Internal Acetylenes, J. Org. Chem.; 66; 2001; pp.412-420.	
		SAKAMOTO Takao et al., Palladium-Catalyzed Coupling Reaction of 3-Iodoindoles and 3-Iodobenzo[b]thiophene with Terminal Acetylenes, Chem. Pharm. Bull, 1988, Vol. 36, No. 6, pgs. 2248-2252	
		SAKAMOTO Takao et al., Palladium-catalyzed Cyanation of Aryl and Heteroaryl Iodides with Copper(I) Cyanide, J. Chem. Soc., Perkin Trans. I, 1999, pgs. 2323-2326	
		SANTANGELO, et al, A Convenient Synthesis of 9-Hydroxy-3,4,5,6-Tetrahydro-1H-Azepino [5,4,3-cd] Indole from 7-Methoxyindole, Synth. Commun.; 23; 1993; pp.2717-2725.	
		SARGES Reinhard et al., A Novel Class of "GABAergic" Agents: 1-Aryl-3-(aminoalkylidene)oxindoles, J. Med. Chem., 1989, Vol. 32, pgs. 437-444	
		SEGEL Irwin H, Behavior and Analysis of Rapid Equilibrium and Steady-State Enzyme Systems, Enzyme Kinetics, 1975, John Wiley & Sons, New York, pgs. 100-125	
		STABLER S Russell et al., Preparation of N-Arylated Heterocycles by Nucleophilic Aromatic Substitution, Synthetic Communications, 1994, Vol. 24(1), pgs. 123-129	
		TANI, M., et al., Regioselective Bromination of Methoxy Derivatives of Ethyl Indole-2-Carboxylate [Synthetic Studies of Indoles and Related Compounds. XXX], Heterocycles Vol.34, No.12 (1992) pp. 2349 - 2362	
		TOKMAKOV Gennadii P et al., Rearrangement of 1-Arylindoles to 5H-Dibenz[b,f]azepines, Tetrahedron, 1995, Vol. 51, No. 7, pgs. 2091-2098	
		UJJAINWALLA Feroze et al., Synthesis of 5-, 6- and 7-Azaindoles via Palladium-Catalyzed Heteroannulation of Internal Alkynes, Tetrahedron Lett., 1998, Vol. 39, pgs. 5355-5358	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box → ☐

PTO/SB/C8B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>			<b>Complete if Known</b>		
			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	7	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		UMEMOTO, T. et al., Power and Structure-Variable Flourinating Agents.The N-Fluoropyridinium Salt System , J.Am. Chem. Soc. Vol. 112 (1990) pps. 8563-8575	
		UNANGST Paul C et al., Synthesis of Novel 1-Phenyl-1H-indole-2-carboxylic Acids. I. Utilization of Ullmann and Dieckmann Reactions for the Preparation of 3-Hydroxy, 3-Alkoxy, and 3-Alkyl Derivatives, J. Heterocyclic Chem., 1987, Vol. 24, pgs. 811-815	
		WAGAW Seble et al., A Palladium-Catalyzed Method for the Preparation of Indoles via the Fischer Indole Synthesis, J. Am. Chem.Soc., 1999, Vol. 121, No. 44, pgs. 10251-10263	
		WOLFE John P et al., Simple, Efficient Catalyst System for the Palladium-Catalyzed Amination of Aryl Chlorides, Bromides, and Triflates, J. Org. Chem., 2000, Vol. 65, pgs. 1158-1174	
		WOLTER, et al., Copper-Catalyzed Coupling of Aryl Iodides with Aliphatic Alcohols, Org. Letters; 4; 6; 2002; pp.973-976.	
		YANG, et al., Palladium-Catalyzed Amination of Aryl halides And Sulfonates, Journal of Organometallic Chemistry 576 (1999) 125-146	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

☒

+

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/848,743
				Filing Date	05-19-2004
				First Named Inventor	NAZARÉ
				Group Art Unit	1713
				Examiner Name	
Sheet	8	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

[illegible][illegible]

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

+

Please type a plus sign (+) inside this box → ☐

PTO/SB/08B (10-96)

Approved for use through 10/31/99. OMB 0651-0031

Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO			<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)			Application Number	10/848,743	
			Filing Date	05-19-2004	
			First Named Inventor	NAZARÉ	
			Group Art Unit	1713	
			Examiner Name		
Sheet	9	of	9	Attorney Docket Number	DEAV2003/0035 - US - NP

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		BOGER, L. et al., Preparation of Distamycin A Analogs and Screening for DNA Binding, Chemical Abstract XP002288822 Accession No.2001:923774	
		HARTWIG, J., Transition Metal Catalyzed Synthesis of Arylamines and Aryl Ethers from Aryl Halides and Triflates: Scope and Mechanism, Angewandte Chemie International Edition; Volume 37, Issue 15, Date: August 17, 1998, Pages: 2046-2067	
		HEINELT, U. et al., Solid-Phase Optimisation of Archiral Amidinobenzyl Indoles as Potent and Selective Factor Xa Inhibitors, Bioorganic & Medicinal Chemistry Letters, Oxford, GB Vol.11, No.2 (2001) pp. 227-230	
		KLAPARS, A. et al., A General and Efficient Copper Catalyst for the Amidation of Aryl Halides, J. Am. Chem. Soc. Vol.124, (2002) pp. 7421 - 7428	
		LAROCK R C et al., Synthesis of 2,3-Disubstituted Indoles via Palladium-Catalyzed Annulation of Internal Alkynes, J. Org. Chem., 1998, Vol. 63, pgs. 7652-7662	
		OLGEN, S. et al., Syntheses and Biological Evaluation of Indole-2 and 3-Carboxamides: New selective Cyclooxygenase-2 Inhibitors, Pharmazie Vol.57 No.4, (2002) pp. 238 -242 XP001180468	
		RODRIGUEZ et al., Versatile Indole Synthesis by a 5-endo-dig Cyclization Mediated by Potassium or Cesium bases, Angewandte Chemie, international Edition (2000), 39(14), pp. 2488-2490.	
		SALITURO, et, al., 3-(2-Carboxyindol-3-yl)propionic Acid Derivatives: Antagonists of the Strychnine-Insensitive Glycine Receptor, J. Med. Chem. 1990,33,2944-2946	
		SEKINE, S. et al., Thiazole Derivative, Patent Abstracts of Japan 09087282 03/31/97	
		UNANGST Paul C et al et al., Novel Indolecarboxamidotetrazoles as Potential Antiallergy Agents, J. Med. Chem., 1989, Vol. 32, No. 6, pgs. 1360-1366	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.